## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Shigeo OHTA et al.

Attn: BOX PCT

Serial No. NEW

Docket No. 2002 0256A

Filed February 19, 2002

A GENETICALLY ENGINEERED cDNA OF RAT bc1-x GENE AND AN IMPROVED PROTEIN [Corresponding to PCT/JP00/05502 Filed August 17, 2000]

## **INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents, Washington, DC 20231

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in international application no. PCT/JP00/05502.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action

and thus no certification and or fee is required.

1b. [] This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 2. It is hereby certified
  - a. [] that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
  - b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [] Consideration of the following list of additional information (including any copending or

- 4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
  - a. [] a full or partial English language translation submitted herewith,
  - b. [X] a foreign patent office search report (in the English language) submitted herewith,
  - c. [] the concise explanation contained in the specification of the present application at page,
  - d. [] the concise explanation set forth in the attached English language abstract,
  - e. [] the concise explanation set forth below or on a separate sheet attached to the reference:
- 5. [X] A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Shigeo OHTA et al.

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February 19, 2002

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FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)  Date Submitted to PTO: February 19, 2002			ATTY DOCKET NO. 2002_0256A RIAL NO. EW				
			APPLICANT Shigeo OHTA et al.				
			FILING DATE February 19, 2002				
			U.S. PATENT DOCUMENTS				
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			FOREIGN PATENT DOCUMENTS				
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	отн	ER DOCUMENT(S	S) (Including Author, Title, Date, Pe	rtinent Pages, Etc.)			
AG	M. Aritomi et al., "Crystal Structure of Rat Bc1-x <sub>t</sub> ", J. Biol. Chem., Vol. 272, No. 44, pp. 27886-27892, 1997.						
АН	W. Fang et al., "Cloning and Molecular Characterizaton of Mouse bc1-x in B and T Lymphocytes", J. Immunol., Vol. 153, No. 10, pp. 4388-4394, 1994.						
AI	D.A.M. Grillot et al., "Genomic Organization, Promoter Region Analysis, and Chromosome Localization of the Mouse bc1-x Gene", J. Immunol., Vol. 158, No. 10, pp. 4750-4757, 1994.						
LA	N. Shirakawa et al., "An Additional Form of Rat Bc1-x, Bc1-x β, Generated by an Unspliced RNA, Promotes Apoptosis in Promyeloid Cells", J. Biol. Chem., Vol. 271, No. 22, pp. 13258-13265, 1996.						
AK	M. Gonzalez-Garcia et al., "bc1-x is the Major bc1-x mRNA form Expressed During Murine Development and its Product Localizes to Mitochondria", Vol. 120, Development, No. 10, pp. 3033-3042, 1994.						
AL	J. L. Tilly et al., "Expression of Members of the Bc1-2 Gene Family in the Immature Rat Ovary: Equine Chorionic Gonatropin-Mediated Inhibition of Granulosa Cell Apoptosis is Associated with Decreased Bax and Constitutive Bc1-2 and Bc1-x <sub>king</sub> Messenger Ribonucleic Acid Levels", Endocrinology, Vol. 136, No. 1, pp. 232-241, 1995.						
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Tilly et al., "Expression Chorionic Gonatropin-Mediate Constitutive Bc1-2 and Bc1-s	PARTMENT OF COMMERCE TAND TRADEMARK OFFICE  PERENCES CITED BY APPLICANT(S) Several sheets if necessary)  Itted to PTO: February 19, 2002  DOCUMENT NUMBER  AA  AB  AC  AD  PORFIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  PORFIGN PATENT DOCUMENTS  DOCUMENT NUMBER  AF  OTHER DOCUMENT(S) Ilincluding Author, Title, Date, Pe AG  M. Aritomi et al., "Crystal Structure of Rat Bc1-x,", J. Bi 1997.  AH  W. Fang et al., "Cloning and Molecular Characterization of Immunol., Vol. 153, No. 10, pp. 4388-4394, 1994.  AI  D.A.M. Grillot et al., "Genomic Organization, Promoter R Mouse bc1-x Gene", J. Immunol., Vol. 158, No. 10, pp.  AJ  N. Shirakawa et al., "An Additional Form of Rat Bc1-x, B Apoptosis in Promyeloid Cells", J. Biol. Chem., Vol. 271,  AK  M. Gonzalez-Garcia et al., "bc1-x is the Major bc1-x mRf its Product Localizes to Mitochondria", Vol. 120, Develop  AL  J. L. Tilly et al., "Expression of Members of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic, and the product of the Bc1-2 G Chorionic Gonatropin Mediated Inhibition of Granulosa Ce Constitutive Bc1-2 and Bc1-x, Messenger Ribonucleic Acception and the product o	ATTY DOCKET NO. 2002_0256A  APPLICANT Shigeo OHTA et al. 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Grillot et al., "Genomic Organization, Promoter Region Analysis, and Chromosome Localizat Mouse bc1-x Gene", J. Immunol., Vol. 158, No. 10, pp. 4750-4757, 1994.  AJ  N. Shirakawa et al., "An Additional Form of Rat Bc1-x, Bc1-x β, Generated by an Unspliced RNA, F Apoptosis in Promyeloid Cells", J. Biol. Chem., Vol. 271, No. 22, pp. 13258-13265, 1996.  AK  M. Gonzalez-Garcia et al., "bc1-x is the Major bc1-x mRNA form Expressed During Murine Develop its Product Localizes to Mitochondria", Vol. 120, Development, No. 10, pp. 3033-3042, 1994.  AL  J. L. Tilly et al., "Expression of Members of the Bc1-2 Gene Family in the Immature Rat Ovary: Eq. Chorionic Gonatropin-Mediated Inhibition of Granulosa Cell Apoptosis is Associated with Decreased Constitutive Bc1 2 and Bc1-x, Messenger Riborucleic Acid Levels". Endocranology, Vol. 136, No. 136

<sup>\*</sup>EXAMINER Initial if reference considered, whether or not citation is in conformance with MFEP 609, Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.